

**Michael Wogalter
Deposition Exhibit 2
Expert Report, pp. 3-9**

As the deposition of Dr. Ralph Goldman points out, the first few days of training camp are critical in the acclimatization process, which may take upwards to a week. Lack of acclimation is a cardinal predictor of heat stroke in football (Eichner, 2002).

Many of the research articles listed above specifically discuss the danger of heat related illness, describing the buildup and retention through physical exertion on hot, humid days.

On July 30 and 31, 2001, Korey Stringer was wearing his helmet and shoulder pads (both manufactured by Riddell) on the practice field at Mankato State University. Korey was a very large person, over 320 pounds, but this is not an uncommon size for NFL linemen. Exertional heat stroke and serious heat related illnesses have been reported in high school, college and professional football. In a seven-year period, the NFL has recorded 656 heat-related injuries (1995-2001). Heat related illness can be life threatening. There are several key factors that make football players more susceptible to heat related illness than participants in many other sports. Some of these include the following: training camp beginning at the hottest parts of summer; players tending to be in lesser shape than other parts of the year, intense physical exertion (partially driven by over-motivation associated with the "warrior" mentality as described in a 2002 report), and wearing an "armored" uniform. This report will focus on the uniform, particularly with regard to the helmet and shoulder pads, as a risk factor for heat related illness including the life threatening medical emergency condition, heat stroke.

Helmets and shoulder pads cover over and insulate a large portion of the body from dissipating heat. It is a dangerous evaporation inhibitor. As more gear is added players will heat up faster, get hotter, and cool slower (e.g., Eichner, 2002). The head and shoulders—more than most other parts of the body—are capable of greater levels of heat dissipation than other parts of the body of equal surface area. Thus, insulating these head and the upper part of the torso with athletic gear such as a helmet and shoulder pads prevents them from cooling as these individuals otherwise would. Those bodily areas are prevented from effectively participating in the cooling process and the equipment actually makes it worse by preventing heat loss by facilitating heat build-up.

The only vent holes on Korey Stringer's AF-2 helmet were ear holes. A year after Korey Stringer died, Riddell, Inc. developed and marketed a newer model helmet in 2002 called the Revolution that features large vent holes (located in the crown).

Riddell representatives seem unaware or do not recall any discussion of any relationship between helmet use and heat related illness / stroke. All of Riddell representatives thus far deposed have said they were unaware of any discussion on the topic of vent holes aiding in reducing heat related illness in football players. Nelson Kraemer (Riddell Director of Engineering) believes that the occurrence of heat-related illnesses is not related to helmets at all.

Furthermore, Dr. Ralph Goldman apparently does not believe that the helmet provides any more loss of heat than another part of the body of the same surface area. Apparently

he sends a letter to the NFL every year urging them to do more regarding temperature related injury. To be more effective, he probably ought to delete the sections related to cold as that obscures the main message regarding heat on players. (The cold seems more of a concern to bystanders's health and safety.) It is clear that if one is wearing other clothing plus a helmet and shoulder pads, heat removal from the body may be retarded during strenuous physical exertion on hot, humid days.

This retarding of heat removal is of particular consequence when heat continues to increase, becoming heat exhaustion, which may continue and become heat stroke.

On hot, humid days, one relatively easy way to increase the amount of heat release is to take off the helmet when not playing or scrimmaging. Also when possible, other parts of the uniform (e.g., shoulder pads) should be considered for removal. As Dr. Goldman states, heat related injury might be reduced if football players were to "suit up in stages during summer camp." With severe heat, the risk might be enough to postpone active practices and games entirely.

The Simbex report indicates some awareness by Riddell on the topic of helmets and heat related illness. The report contains an analysis of temperature between the Revolution and the VSR-4 (similar to AF-2) helmets. No statistically significant difference was found but the study's redacted descriptive write-up did not allow an evaluation of power to detect differences with respect to heat retention. Certain measures are missing (either not actually done or redacted from the report). Nevertheless, the report concludes that "Opportunities for improved cooling via convection (vents) and conduction (materials) are possible (pg. 19)."

Riddell does not market or make the claim that Revolution is better for heat loss than previous helmets. It is my belief that a difference might have been found in the Simbex study had measurements been taken while the two helmets are moved up onto the forehead (rather than carrying it around) as many players do on the sidelines or otherwise wearing it more loosely when not actively involved in a game or in scrimmages. Comparison of the potential for greater airflow off the head between helmet models has not been examined except in one way. Other measures might have shown greater air ventilation for the Revolution compared to the VSR-4 configurations than was discussed in the heavily redacted report.

Is there an adequate warning regarding heat related illness?

The question asked queries whether warnings were adequate in communicating the hazard associated with the risk of heat related illness and in particular the most serious level: heat stroke. My answer is that the Riddell's warning for this hazard was inadequate; indeed it was wholly absent.

The failure to warn about heat related illness is a serious error. This is a main hazard associated with the helmet and shoulder pad products. Riddell representatives state this fact: the primary reason of the helmet and shoulder pads is to protect from impact type

injuries. However, it is not acceptable to deal with one hazard to the exclusion of another known and substantial (severe) hazard, but this appears to be exactly what Riddell did. The hazard is that the helmet and shoulder pads prevent heat dissipation and exacerbate the potential heat related illness in hot, humid weather beyond what would result from *no* helmet and shoulder pads being worn. Apparently, Riddell has not taken much effort at all in working towards a helmet that would reduce the likelihood of heat related illness. Who has greater knowledge of heat stroke as it pertains to football players? (a) The manufacturer of products that contributes to the condition and which sells thousands each year or (b) an individual player? The manufacturer has or should have superior knowledge about the condition that their product exacerbates relative to users. Indeed, the availability of the NFL report, which lists the large number of heat-related injuries that have occurred in recent years, is particularly noteworthy. Manufacturers need to examine their product to determine if there are hazards associated with use and foreseeable misuse. Heat release without hurting its impact protection should have been a primary concern for a manufacturer of football helmets. Instead at least two of the three of Riddell's representatives deposed thus far indicate recalling little or no discussion concerning ways to reduce or eliminate the heat related illness. The code word is that the new Revolution helmet was designed for "comfort." They have not reported data on their "comfort" claim, except perhaps that it is wrong due the null thermister results in the Simbex report. For some reason, Riddell has not been vigilant in a search for a solution to reduce heat related illness. Furthermore, two of the three Riddell representatives reported being unaware of research on heat related illness with regard to uniforms. They also did not know about some after-market products that might assist in reducing heat related illness. Altogether, this seems negligent given that these individuals are authoritative company officials.

According to statistical evidence, there have been years with more fatal injuries due to heat than due to impact in football. (Some reports have suggested that the data for heat related illnesses are underestimates.) Thus, given the available information, it seems rather reasonable to conclude that Riddell knew about heat injuries and their product's role (even if it was simply suspected) prior to the subject products' manufacture. (Note that I have assumed no particular manufacture date other than the dates on the helmet's "blue" print drawings—late 1990s.) Apparently, Riddell has done nothing on heat related loss since the manufacture of Stringer's helmet except for having released the newer Revolution helmets, which are said to aid in comfort.

In the literature I reviewed for this case, there are several sets of published recommendations on how to prevent heat related illness, including ones that specifically address football players. There were no heat related illness warnings associated with Riddell football helmets at the time of Korey Stringer's death.

It is Riddell's responsibility to produce reasonably safe products. To do this, they need to thoroughly examine their product to determine what hazards, if any, are associated with its use and foreseeable misuse.

After analyzing the product and determining that it has hazards, there is a hazard control hierarchy that can be used to assist manufacturers in limiting injury. The first and best method of the hazard control hierarchy is to try to remove the hazard from the product, or in other words to eliminate or reduce associated dangers. If venting is a potential way to eliminate or reduce the thermal hazard then this would be a method of designing out the hazard. There may be many ways to design out hazards, but the methods may not work with all product cases. The second best method in the hazard control hierarchy is to guard against the hazard. This could include separating the hazard from the person. A potential guarding method (to separate heat from the person) might include a frozen gel insert, but might also involve other methods. The third method is warning. It is generally not as effective or as reliable as the methods of designing out the hazard and guarding against the hazard solutions, but warnings are sometimes a necessary method of hazard control. Warnings were and are a potential way to reduce heat related illness in football players, particularly when the hazard was not effectively designed out or guarded against.

One very important and overarching fact in considering whether the product warnings from the manufacturer Riddell were adequate is that Riddell DID NOT provide any warnings on heat related illness.

There are warnings on heat related illness in less accessible and available sources with respect to users such as in the medical and academic literatures; however, it is not reasonable to expect users to read the technical/research literature on the topic.

There is enough evidence to conclude that Riddell knew (or should have known) about heat related illnesses in relation to wearing football equipment, including that it tends to occur with players that are bigger, and who are not acclimated to hot and humid weather at the time training camp starts. The subject "protective" equipment facilitates and exacerbates heat retention and buildup (i.e., increases the risk of hyperthermia and heat stroke). Riddell could have easily included this information to purchasers and users of the helmet and shoulder pads.

In addition, Riddell could have made use of the materials accompanying this product (as well as other opportunities to warn such as posters, materials directed to coaches and trainers, and press releases to the media) to warn about the hazard.

The warnings on the helmet and in the insert (fitting instructions) concern mainly impact injury and clearly indicating (mostly from a legal viewpoint) that the helmet cannot protect against intended or unintended prohibited types of tackles (or as indirectly interpreted - contact happens, you could be injured and we don't take responsibility). There are also warnings about cleaning and painting with chemicals that might hurt the helmet's outer surface to the extent that it compromises the helmet's physical integrity. There is no warning concerning heat related illness on either the helmet or insert, nor as I understand it, on the shoulder pads.

Riddell's engineers Thad Ide and Nelson Kraemer both make the point that Riddell's warnings are more extensive than is required by NOCSAE, because it describes

concussions and symptomology. Being more extensive does not make them adequate when the warnings miss telling about a substantial hazard.

Note that I have not seen a box or any other containers that may have accompanied the product when it was transferred to a distributor or retailer. Also, I have not yet seen any warnings associated with Riddell's shoulder pads nor any insert or container. I hope that these materials will be produced before any subsequent report or testimony.

Heat stroke is the most severe form of heat related illness. It is an emergency, life-threatening event that is preventable. There are technical methods that can be used with victims before illness severity increases and results in disastrous consequences. "Cool first then transport" is one heuristic for knowledgeable rescuers. Any one could be a rescuer so the word needs to get out on what to look for (and to try to prevent heat related illness in the first place). Heat related illness could progress to more severe forms because one of its peculiar characteristics is that it can be difficult to recognize by the actual person suffering heat related illness. One of the symptoms of heat stroke is mental confusion. Other acute illnesses where victims may not recognize before they are a victim include carbon monoxide poisoning and high "G" flight. People can recognize they are getting hot on a warm day, but they may not recognize that they are falling prey to it. This manifest mental status change co-occurs with the physical developments. It is further problematic when this is occurring with motivated, hard working athletes. Many take on a warrior mentality to "gut through" difficulties, not realizing that they may be reaching the level of a life threatening condition. One 2002 article describes 300+ lb line men of the NFL as "heat bombs" because the gear makes them heat up faster and cool down slower. Warning information about the heat hazard would make players better armed to recognize the signs and symptoms as they are beginning to have problems—before they lose mental capability to make quality judgments.

However, even if users lose their awareness as the event progresses, prevention of serious injuries could occur by having others around the user notice the illness. Other persons well versed on what signs and symptoms to look for can help in prevention or further progress of heat related illness. Thus an important component of an effective warning system regarding heat related illness is to direct the message to others such as other players, trainers, and coaches instructing them to be vigilant in checking for signs and symptoms of players on warm and hot days. A good warning would have relevant others looking out for players, particularly ones in full uniform, to notice whether there are signs and symptoms of heat related illness. There is appropriate content for potential warnings in the articles that I reviewed for this case.

Given what I have been provided, a conclusion can be reached that Riddell failed to inform users that their football helmet and shoulder pads are associated with an increased likelihood of heat related illness. Two basic locations for product warnings are the helmet and the insert. Indeed there were warnings about impact and to avoid using any chemicals other than Riddell's own products on the Ka-Lite II outer surface. Other potential locations for warnings were shipping/display box, tag, poster, brochure, etc.

The Riddell Vice President of Sales Thomas Klepeck claims being unaware of aftermarket products concerned with heat removal due to helmet use. Riddell produced a new helmet notable for crown venting that is marketed as being more comfortable (as it pertains to cooling). Yet Riddell never goes so far as to tell people that cooling is essential when wearing football helmets in high heat and humidity.

Dr. Lawrence Armstrong, an expert in this case, produced a research report that demonstrates that heat retention and buildup is more rapid and worse with a helmet and shoulder pads on compared to off (with rest of uniform being worn). Wearing NO helmet and shoulder pad retains less heat compared to a helmet and shoulder pad on. Given that there is a history of football players becoming severely ill due to heat exhaustion and stroke, and the subject Riddell equipment retards heat loss, the manufacturer of the offending products should have provided a warning about the potential hazard to users.

I would have expected that a manufacturer of football helmets, who is in essence making a helmet for one form of injury prevention, would have been interested in increasing football players' safety with regard to this heat related illness relative to the heat retention of their products. This is an issue that could threaten people's lives and it is amazing to me to see there was no warning anywhere produced by Riddell on this topic.

Korey Stringer's helmet was not the latest known technology when it was manufactured. The new Revolution helmet needed a new mold (as apparently drilling holes may compromise the structural integrity). This innovation in vent design began to be marketed by Riddell a year after Korey Stringer's death. A corporate partner of Riddell is Bell. Bell had produced helmets with vents for years prior to Korey Stringer's death. The company representatives note that that vented helmets have been used in the sports of biking and lacrosse.

If Riddell was not going to produce or manufacture a heat dispersing helmet (for whatever reason), the company should have at least told users (and others) about the hazard and they did not. In the marketing materials for the newer Revolution helmets, the issue of thermal comfort is mentioned, but this cannot be considered a warning for heat related illness for this and prior helmets (and in any event the information was given after Korey Stringer's death).

Currently, the NFL's website has a warning to "Remove helmets when not playing or scrimmaging." The National Athletic Trainers' Association has issued a similar warning stating that the helmet should be taken off in games between periods and at halftime, during hot weather. They also state that the removal of the helmet for a period of time will "assist in the reduction of core body temperature and reduces the risk of developing a heat illness." A short warning to take off the helmet while not playing or scrimmaging in hot weather could have easily been given by Riddell. They did not, despite knowing that heat related illness occurs during training camps and knowing people in these cases might have benefited from early recognition and prevention.

Additionally motivation and warrior mentality may be involved. Thus, the warning language and format needs to capture attention and communicate clearly and in a persuasive manner to the targeted individuals at risk. Generally a good warning would include (a) a signal word panel to attract attention and cue the level of risk e.g., through word semantics, color and icon, (b) a clear description of the hazard, (c) explicit consequences, and (d) instructions on how to avoid the hazard. A pictorial symbol is also recommended to capture attention and to communicate in a graphical manner the hazard information.

Conclusions

As a manufacturer with superior knowledge about its own products and their associated hazards, Riddell had an obligation to produce a safe product. Part of making a safe product is to warn about hazards that are associated with using the product. With regard to heat related illness, football helmets and shoulder pads enhance heat buildup and retention, yet there were no warnings on the topic that they gave with their products.

Warnings from Riddell to football helmet users and should pad users regarding heat related illness were needed and were not present anywhere in company materials that were produced. This, therefore, makes the Riddell warnings, and ultimately the products involved deficient, inadequate and defective.

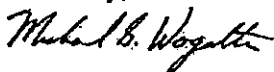
The conclusions and opinions given in this report are made to a reasonable degree of human factors confidence.

At this point in time, I have not determined what exhibits I will use at trial. I anticipate that I will refer to the materials that Riddell has produced as well as other materials related to warning effectiveness. I would like to show examples of on-product labels in comparison to 1991/1998 ANSI Z535.4 (Product Safety Signs and Labels standard) and research demonstrating beneficial characteristics of warnings. In addition, I would like to be able to refer to any of the materials I have reviewed in preparation of this report as well as other demonstrative materials in the area of human factors (my expertise) as they may relate to this case, as well as any discovery produced from this point forward up until testimony is given at deposition and at the trial of this matter.

Attached in a list of cases in which I have testified at deposition or trial over the past 4 years. I have not yet submitted an invoice for my review and other work in this case however my rate is \$400/hour.

As this is a preliminary report, I request the opportunity to modify or supplement should additional discovery warrant it.

Sincerely,



Michael S. Wogalter, Ph.D.

Michael Wogalter Deposition Excerpts

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

KELCI STRINGER, individually)
as representative of the Estate)
of Korey Stringer, and on)
behalf of a class of similarly)
situated persons,)

Plaintiff,)

-vs-

NATIONAL FOOTBALL LEAGUE,)
et al.,)

Defendants.)

Case #C2 03 665

DEPOSITION OF MICHAEL S. WOGALTER, Ph.D.,
taken by me, Susan L. Bickert, a Certified Shorthand
Reporter and Notary Public in and for the State of
Ohio, at large, as upon Cross Examination, at the
offices of Waite, Schneider, Bayless & Chesley Co.,
LPA, 1513 Fourth & Vine Tower, Fourth and Vine
Streets, Cincinnati, Ohio 45202, on Tuesday, July
22, 2008, commencing at 9:30 o'clock a.m. on behalf
of Defendants All American Sports Corporation and
Riddell, Inc.



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1 We'll let Mark go. I reserve the right to sit here
2 and think for a few minutes and maybe come up with
3 some more questions, but I think I'm done.

4 Mark, you got anything?

5 MR. MOSIER: Nothing for me.

6 MR. KELLY: Louise, have you got any

7 Direct?

8 DIRECT EXAMINATION

9 BY MS. ROSELLE:

10 Q Dr. Wogalter, if you look at page 9
11 of your report where you talk about "A good warning
12 would include (a) a single word panel to attract
13 attention and cue the level of risk, e.g., through
14 word semantics, color and icon, (b) a clear
15 description of the hazard, (c) explicit
16 consequences, and (d) instructions on how to avoid
17 the hazard," even though you haven't designed a
18 warning for this helmet, could you tell me some of
19 the things that you think should be in the warning?

20 A Well, some of the aspects related to
21 warnings for inclusion would be things like a signal
22 word, something to capture attention and give you a
23 level of the hazard; to describe the hazard: heat
24 exhaustion, heat stroke, emergency medical
25 condition; to give consequences: serious injury,

1 death, brain injury; instructions on how to avoid
2 the hazard: remove the helmet when not in use, to
3 give some other instructions that are in the
4 literature such as watching for whether people are
5 acclimatized. Giving some information about that.
6 Giving some other predictive information such as
7 symptoms and signs, whether a person has had heat
8 stroke or heat exhaustion in the past or the past
9 day, and also to give some basic first aid
10 information such as Cool First, Transfer Second.

11 Q So on page 8 of your report near the
12 bottom of the page where you say in the last
13 paragraph, "Currently the NFL's website has a
14 warning to 'Remove helmets when not playing or
15 scrimmaging,' you're saying that the warning that
16 you would recommend would be much more inclusive
17 than that warning; is that correct?

18 A Yes.

19 MS. ROSELLE: I have nothing further.

20 MR. KELLY: That generates some follow-up
21 for me.

22 RECROSS EXAMINATION

23 BY MR. KELLY:

24 Q So you think Riddell has a duty to
25 warn of each and every factor that might contribute

1 to heat-related illness?

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2 A I think that Riddell should give some
3 of the most salient. We have talked about
4 prioritization. So the most salient information
5 that's associated with it. I'm not saying that it
6 has to do with everything, but some of the
7 literature does suggest that having heat exhaustion
8 the day prior is predictive of future heat stroke,
9 and the acclimatization aspect, and then also the
10 symptoms. And all that would come from -- you
11 wouldn't give everything. I don't believe that you
12 needed to give everything. But to pare it down to a
13 moderately-sized warning that could be included in
14 an insert.

15 Q And you also included as you were
16 answering counsel's question suggestions for
17 treatment, didn't you?

18 A Well, one aspect of it. I'm not
19 saying to -- that you need to go through and take
20 blood pressure and rectal temperature and all these
21 other things. But I think it's -- it's not so
22 uncommon to give some first aid, and that's a -- the
23 "Cool first, Transport second" is some basic
24 information that's in the literature.

25 Q So if I hear you right, Riddell's

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1 supposed to know the factors that cause heat stroke,
2 decide which ones are the most salient, prioritize
3 those factors, tell people how to recognize
4 symptoms, and then tell 'em to -- what should be
5 done in the event they observe those symptoms?
6 That's your testimony?

7 A Yes.

8 MR. KELLY: Okay. I have nothing further.

9 MS. ROSELLE: I have nothing further.

10 (The taking of the deposition concluded at
11 2:00 o'clock p.m.)
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Peter David Halstead Deposition Excerpts

DEPOSITION OF PETER DAVID HALSTEAD

September 19, 2008

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHEASTERN DISTRICT OF OHIO
EASTERN DIVISION

KELCI STRINGER, Individually
and as representative of the
ESTATE OF KOREY STRINGER,

Plaintiff,

vs.

NATIONAL FOOTBALL LEAGUE,
et al.,

Defendants.

:
:
:
:
:
: Case No.
: 2-03-665
:
: JUDGE HOLSCHUN
:
: Magistrate
: Judge Abel
:
:

APPEARANCES:

FOR THE PLAINTIFF:

Paul M. DeMarco, Esq. (Telephonically)
Waite, Schneider, Bayless & Chesley
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FOR THE DEFENDANT Riddell, INC.:

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Tucker, Ellis & West
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of the harm that could result from wearing Riddell helmets and shoulder pads in hot and humid conditions?

MR. KELLY: Same objection to lack of foundation, assuming facts not in evidence.

THE WITNESS: Yeah, I don't know how to answer that other than I don't believe that helmets and shoulder pads are, in fact, going to result in this serious event. And I think I made that pretty clear. So again, I think that's an answer to your question in an inverse sort of way. Because I can't get past the fact that your question seems to predispose that that occurs, and I'm quite certain it doesn't.

BY MR. DEMARCO:

Q Okay. No harm occurs from wearing Riddell helmets and shoulder pads in hot and humid conditions?

MR. KELLY: Objection; vague and ambiguous.

BY MR. DEMARCO:

Q Is that your opinion?

A Not precisely. I certainly recognize that wearing helmets and shoulder pads can have some effect on the amount of surface area that's available for evaporative cooling, but no more than if it was a

summary of professional opinions, I spell out that it's been alleged that the helmet and shoulder pads are the, or at least a primary factor in the events that led to the tragic death of Mr. Stringer. This is simply not the case. That's my position.

BY MR. DEMARCO:

Q Okay. In reaching your opinions in this case have you made any finding concerning the exact likelihood that harm would result from wearing Riddell helmets and shoulder pads in hot and humid conditions?

MR. KELLY: Object; vague and ambiguous.

THE WITNESS: I don't think harm results from wearing helmets and shoulder pads in these conditions. To the extent -- I guess the way you're asking the question is if the guy was standing out there naked and he was wearing helmets and shoulder pads, would this somehow cause this event to take place. And I don't believe it would. I believe the helmets and shoulder pads are the most minor of a myriad of concerns when in this kind of environment doing this kind of work.

do-rag and a shirt.

Q So the effect that you've just mentioned, have you made any finding, can you point anywhere where in your report you discuss the seriousness of that effect on a human body?

A I don't think it's a serious effect on the human body. I think it is the most minor of effects on the human body. And the trade-off of not wearing them during those exercises is incredibly clear. And I do think --

Q Where in your report do you say that it is not a serious effect on the human body? I don't want -- I want it straight from your report here.

A Sure, sure.

Q I want you to point in your report to this.

MR. KELLY: I want to object that the question is vague and ambiguous.

MR. DEMARCO: Go ahead, Doctor.

MR. KELLY: He's looking at his report.

THE WITNESS: Yeah, I'm looking at my report here. Again, I believe I've answered in the inverse. Maybe we're not understanding each other, but in the second paragraph, under

BY MR. DEMARCO:

Q Mr. Halstead, could you point to me where in your report you address precisely the likelihood that harm would result from wearing Riddell helmets and shoulder pads in hot and humid conditions? Can you point to that in your report, please.

MR. KELLY: Objection; vague and ambiguous, and assumes facts not in evidence.

THE WITNESS: I cannot point to it because I don't believe it occurs. So somehow, it seems like what you're asking is do I point out something that I believe firmly doesn't occur or might occur. I'm very confused by that.

BY MR. DEMARCO:

Q Well, Doctor, you know, we may be confused by one another's questions and one another's answers, but we've got to get them on the record.

A Understood, sir. No problem with that. I'm just trying to be as responsive as I can be. And I feel like I'm being evasive, but that's not my intent.

Q Point to me where in your report you give us your assessment of the likelihood that harm would result from wearing Riddell helmets and shoulder

1 BY MR. DEMARCO:

2 Q And by that, you mean you didn't
3 speak in your report to the scientific knowledge and
4 advances that Riddell considered in this area?

5 MR. KELLY: Objection; lacks
6 foundation, assumes facts not in evidence, and
7 mischaracterizes the scientific data.

8 THE WITNESS: No. I did not quiz
9 Riddell as to what they may have done. I
10 certainly have looked at the data, and I don't
11 believe there's anything to be done.

12 BY MR. DEMARCO:

13 Q It's reasonable to think that an NFL
14 player wearing a Riddell helmet and shoulder pads would
15 not expect to get heat stroke as a result, correct?

16 MR. KELLY: Objection; lacks
17 foundation, calls for speculation.

18 THE WITNESS: I think the assumption
19 that's got us at loggerheads is that somehow
20 that's what causes heat stroke, and I don't
21 believe that to be the case.

22 BY MR. DEMARCO:

23 Q Doctor, why don't you just suspend
24 your disbelief for a second and answer the question.

25 A Because the question asks me to make

1 the same thing?

2 MR. KELLY: Objection; vague and
3 ambiguous, assumes facts not in evidence, calls
4 for speculation.

5 THE WITNESS: No. I don't think
6 we're saying the same thing because the word
7 "expect" is like anticipation. And if a
8 football player anticipated he was going to
9 have anything happen to him, it would be a head
10 or torso injury, and that's why he's putting
11 that helmet on, and that would be his first
12 concern.

13 BY MR. DEMARCO:

14 Q So are you saying that he would
15 anticipate getting heat stroke as a result of putting a
16 Riddell helmet and shoulder pads on?

17 MR. KELLY: Objection; calls for
18 speculation, mischaracterizes his testimony,
19 assumes facts not in evidence. You can answer.

20 THE WITNESS: I don't think he would
21 make that expectation if we wanted to sit down
22 and ask him what he anticipates when he puts on
23 a helmet and shoulder pads. It's probably --
24 you know, heat exhaustion or heat stroke is so
25 far down the list so as to not be on the list.

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1 that assumption to begin with.

2 Q Okay. So why don't you just try to
3 answer the question. Suspend your disbelief and answer
4 this question. It is reasonable to think that an NFL
5 player wearing a Riddell helmet and shoulder pads would
6 not expect to get heat stroke as a result, correct?

7 MR. KELLY: I will object to lack of
8 foundation, calls for speculation, and assumes
9 facts not in evidence. You can answer.

10 THE WITNESS: I don't know that an
11 NFL player says I'm going to wear a helmet and
12 shoulder pads today. What might that do to my
13 performance. More likely it's I'm wearing a
14 uniform today that may or may not include
15 helmets and shoulder pads. I guess I'm having
16 trouble answering that question. I don't think
17 that an NFL player is going to associate
18 helmets and shoulder pads with heat exhaustion
19 or heat stroke. I don't think that's a
20 reasonable assumption.

21 BY MR. DEMARCO:

22 Q In other words, you think it's
23 reasonable to think that an NFL player who puts on a
24 Riddell helmet and shoulder pads would not expect to get
25 heat stroke as a result of doing that? Aren't we saying

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1 BY MR. DEMARCO:

2 Q Okay. It's reasonable to think that
3 NFL teams equipping their players with Riddell equipment
4 would intend that players could wear the Riddell helmet
5 and shoulder pads without developing heat stroke as a
6 result? Reasonable to think that, isn't it?

7 MR. KELLY: Objection; calls for
8 speculation, lacks --

9 THE WITNESS: No --

10 MR. KELLY: Hold on, Dave. Lacks
11 foundation, assumes facts not in evidence.
12 Dave, you've got to give me a chance to get
13 these objections on before you answer.

14 THE WITNESS: I'm sorry.

15 MR. KELLY: Go ahead.

16 THE WITNESS: I will try and slow
17 down for everyone's benefit. I don't -- again,
18 the way you've asked the question is like maybe
19 if they had somebody else's equipment besides
20 Riddell's, they'd have a different expectation,
21 and I don't see that at all.

22 BY MR. DEMARCO:

23 Q Mr. Halstead, all I'm asking you
24 about is Riddell. I'm not asking about Riddell compared
25 to anyone else, so let me repeat the question. It's

not in evidence, vague and ambiguous. Go ahead.

THE WITNESS: Yeah, I'm not sure I know the epidemiology of Methylin-resistant staph well enough to know that. I know it's on the rise. I know I read a lot of bulletins about it. I get a lot of questions about it. There have been some deaths and I'd be -- that would probably be higher on the list.

BY MR. DEMARCO:

Q Have you read any studies associating it with football helmets?

A I've read studies associating it with a whole variety of football gear. Also associating it with, I guess, what I'm going to call simple hygiene. I guess my point here is I think heat illness -- another reason heat illness would be pretty low on my list is heat illness is, I believe, well understood. People are on the lookout for it. They recognize it. I think players, coaches -- I don't think you can be an athletic trainer or coach without hearing about this repeatedly and routinely.

MRSA is a little new, and that might be the only reason you'd consider that warning, because some people might not even be aware that the gear could

about frequently in coaches clinics. And when I hear what these guys had to say, not only routinely in my conversation with similar folks, meaning other coaches and players and trainers, but also with what I read, as I recall, of the testimony of some of these guys, they were on the lookout for that.

Q Are you an expert in athletic training?

A I would say I'm not an expert in athletic training.

Q You say in your report -- let me ask it this way. To a reasonable degree of professional certainty in your field, do you believe that the Vikings athletic trainers on July 31, 2001 already knew that the Riddell helmet and shoulder pads subjected Korey Stringer to a risk of heat stroke?

MR. KELLY: Objection; assumes facts not in evidence, argumentative. Go ahead.

THE WITNESS: I think that the trainers know whenever there's an increase in work load, and helmets and shoulder pads increase work load. And whenever there's a decrease in the potential evaporative effect, and certainly clothing and equipment can decrease that surface area, I think they

be the contaminant that carries this illness from one to another.

Q Okay. Do you think heat illness and the risks of it were well understood by the Minnesota Vikings coaches and trainers?

A Yes, I do.

Q What is your basis for stating such an opinion as an expert opinion?

A Sure. Part of it is my daily interaction -- I say daily, my almost daily interaction with football teams -- maybe it is daily, actually, with football coaches and players and parents. My very frequent interaction with NFL players and coaches, and the actual testimony that I have seen in association with this case, where they stated they were quite aware of it.

Q Actually, I was asking you what qualifies you to state an expert opinion about how well aware. Any of us can review deposition transcripts, but what qualifies you to state an expert opinion about how well aware the Vikings coaches and trainers were?

A I guess I don't know the fine distinction there. I mean, I think -- like I said, I'm not an expert in heat illness, I'm not a medical doctor, don't treat the stuff. But it is something that we talk

recognize that those are risk factors.

BY MR. DEMARCO:

Q What conduct by the Vikings athletic trainers on July 31, 2001 showed that they already knew that the Riddell helmet subjected Korey Stringer to a risk of heat stroke?

A I don't think any specific to the Riddell helmet.

Q What conduct by the Vikings trainers on July 31, 2001 showed that they already knew that the helmet Korey Stringer was wearing subjected him to risk of heat stroke?

MR. KELLY: Objection; assumes facts not in evidence, lack of foundation.

THE WITNESS: I don't think the helmet subjected him to heat stroke and I don't think the athletic trainers were specifically thinking, oh, my goodness, there's a helmet on the field, let's worry about heat stroke. It doesn't work that way. I don't think it should work that way. But I do think that athletic trainers are cognizant of the risk of heat stroke. I think they're very much aware of it, and I think they recognize that if the work load goes up, the risk goes up. And I think

1 they recognize that the equipment adds to the
2 work load. I don't --
3 BY MR. DEMARCO:
4 Q Are you saying as an expert that they
5 link the risk of heat stroke to the helmet?
6 A I'm saying they do not.
7 Q Okay.
8 A Nor should they.
9 Q When you just described the warning
10 that you would not include -- or that you would
11 include -- before you would include the, on the helmet,
12 the risk of heat illness, you justified not including
13 the heat warning and including the bacteria warning
14 because you said the heat illness connection was well
15 understood. Did I miss something there?
16 A I hope not. I hope I didn't say a
17 connection between the gear and heat illness is well
18 understood, but that heat illness is well understood. I
19 do think there is a connection, a better connection
20 epidemiologically very early on between MRSA and
21 equipment than there is between heat illness and
22 equipment. Which is why it would make the list first,
23 hypothetically. I'm not saying any of them would make
24 the list.
25 Q Does anything else make the list

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1 before heat illness?
2 MR. KELLY: Calls for speculation.
3 THE WITNESS: I might add --
4 BY MR. DEMARCO:
5 Q It's your list. Go ahead, tell me.
6 What's on the list before heat illness?
7 A Sure. One of the things I guess --
8 again, I don't know that I would put it on there because
9 I think anything you put on there dilutes the very
10 important message that's on there now. But above heat
11 illness I would put using your football helmet for
12 something other than football.
13 Q Such as?
14 A Oh, I don't know. I've seen kids
15 wear their football helmet in their homemade soap box
16 derby type go-cart. I wouldn't want that to occur. And
17 I think that's a reasonable and foreseeable event, so I
18 would be more inclined to warn about unauthorized or
19 unwise uses of the helmet by limiting it to football
20 only. That would make the list before heat illness.
21 Q What's the risk of wearing the
22 football helmet other than for football?
23 A Football helmets are very different
24 than crash helmets for very specific reasons. And to
25 wear a foot helmet as a crash helmet would be a

1 tremendous error. Football helmets are outstanding when
2 you're playing football. Don't wear your motorcycle
3 helmet to play football. And if you're going to ride
4 your Harley around the block, don't wear your football
5 helmet, wear your motorcycle helmet.
6 Q So the risk of that is what?
7 A The risk of that is significant brain
8 injury when the football helmet fails to address the
9 threats associated with riding your homemade soap box
10 derby down a city street.
11 Q Mr. Halstead, is heat stroke a
12 potentially fatal illness?
13 A Heat stroke is a potentially fatal
14 illness.
15 Q Can you identify any conduct by the
16 Vikings athletic trainers that showed that they already
17 knew that the Riddell helmet subjected Korey Stringer to
18 a risk of heat stroke?
19 MR. KELLY: Objection; lacks
20 foundation, assumes facts not in evidence. He
21 said any conduct.
22 THE WITNESS: Yeah, I can't think of
23 any conduct that could be linked to the helmet.
24 BY MR. DEMARCO:
25 Q Okay. Can you think of any conduct

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1 by the Vikings athletic trainers on July 31, 2001 that
2 showed that they already knew that the Riddell shoulder
3 pads subjected Korey Stringer to a risk of heat stroke?
4 MR. KELLY: Objection; assumes facts
5 not in evidence and lacks foundation. Go
6 ahead.
7 THE WITNESS: I don't believe there
8 was anything specific to the shoulder pads.
9 BY MR. DEMARCO:
10 Q Do you believe the Vikings coaches on
11 July 31, 2001 already knew that the Riddell helmet
12 subjected Korey Stringer to a risk of heat stroke?
13 MR. KELLY: Same objections.
14 THE WITNESS: I don't think it's been
15 established that the helmet increases the risk
16 of heat stroke. And I doubt if the coaches
17 were thinking that way at all. I don't know,
18 of course, how they were thinking, but I saw
19 nothing that indicated they were thinking the
20 helmet was an issue.
21 BY MR. DEMARCO:
22 Q So the answer is no?
23 A The answer is what I gave, which
24 includes all of it.
25 MR. DEMARCO: Court reporter, can you

1 A I am.
 2 Q Have you ever dealt with that piece
 3 of equipment before?
 4 A I have.
 5 Q Have you ever held one in your hands
 6 and examined it?
 7 A Yes.
 8 Q You've watched the practice video,
 9 right?
 10 A I have.
 11 Q And you've seen some pictures that I
 12 showed you which I'll represent were produced to me by
 13 plaintiff's counsel of the Vikings practices on July 30,
 14 July 31. Do you remember those pictures?
 15 A I do.
 16 Q Can you tell from the video and/or
 17 those pictures whether -- do you think that
 18 Korey Stringer was wearing a cowboy collar in those
 19 pictures?
 20 A He was.
 21 Q How can you tell that?
 22 A You can see the cowboy collar in some
 23 pictures. You can see how the cowboy collar affects the
 24 jersey in other pictures. And there is a photograph
 25 that I have here that I believe is of his equipment, and

1 there's a cowboy collar as part of his shoulder pad
 2 package.
 3 Q Okay. You've testified earlier that
 4 you think any piece of clothing that somebody wears, or
 5 equipment, and you went through a list including pants
 6 and socks and gloves and pads and helmets --
 7 A Correct.
 8 Q -- has some effect on the work load
 9 and some effect because it covers skin, right?
 10 A That's correct. On evaporative
 11 cooling, yes.
 12 Q Would that analysis also apply to a
 13 cowboy collar?
 14 A Absolutely.
 15 Q In your experience interacting with
 16 football coaches and trainers, who is it that makes the
 17 decisions as to when practices are scheduled, what's
 18 done in practices, the structure of the practices and
 19 things like that?
 20 A Well, almost entirely those are
 21 coaching decisions. Some coaches, many coaches will
 22 involve athletic trainers or team physicians in those
 23 decisions. Certainly for an individual player, trainers
 24 and medical staff are involved.
 25 Q You testified at great length about

1 warnings and when you think a manufacturer should or
 2 shouldn't warn. If you believe that the users of
 3 equipment and people around the users, and in this case
 4 I'm talking about players and trainers and coaches, does
 5 it matter to you whether they are already aware of the
 6 risk?
 7 A Absolutely.
 8 Q What effect would their awareness
 9 have on your warnings analysis?
 10 A It would put the need for a warning
 11 for that particular risk they're aware of much lower on
 12 the list.
 13 Q Okay. Now, I think you said that
 14 earlier. I just wanted to clarify it.
 15 For how many years have you been
 16 involved in the formulation of standards for warnings on
 17 athletic protective equipment?
 18 A Twenty-two years, at least.
 19 Q You testified about your work as an
 20 expert. Tell me how you handle the intake of cases, and
 21 let's just speak right to the issue. How do you handle
 22 intake of plaintiffs' cases?
 23 A I'll look at a case from anybody.
 24 There might be times when I have conflicts, either
 25 because of an attorney involved or because of some

1 intimate knowledge about a particular company, but
 2 otherwise, I will look at any case and I will evaluate
 3 that case and write my report. About half of my reports
 4 are for plaintiffs and half of my reports are for
 5 defense. A much smaller percentage of plaintiffs seem
 6 to go forward to trial.
 7 MR. KELLY: That's all I have.
 8 EXAMINATION
 9 BY MR. DEMARCO:
 10 Q Mr. Halstead, you mentioned that it
 11 could obviate the warning if the particular risk was
 12 known to the players, correct?
 13 A I don't know that I used the word
 14 obviate. I said I would put it a lot lower on the list.
 15 And it may well obviate it, yes. I would agree with
 16 that in that context.
 17 Q Are you contending that the
 18 particular risk of heat stroke should have been known to
 19 NFL players?
 20 A Yes.
 21 Q Are you contending that a warning was
 22 unnecessary on the Riddell helmet because NFL players
 23 already knew that the helmet posed a risk of heat
 24 stroke?
 25 A No. But let me add to that. I

1 believe there's not a need for a warning because I
2 believe it's such a minor factor in heat stroke. But
3 the fact that I believe they're all aware of heat stroke
4 puts it even lower on my list, to the point of obviating
5 it, yes.

6 Q Okay. But Mr. Kelly's questions were
7 why wouldn't you put it on the -- the reasons for not
8 putting it on the helmet. Why were you talking about
9 heat stroke in relation to the helmet if the helmet
10 doesn't pose a risk of heat stroke?

11 MR. KELLY: I don't think that was my
12 question. And if it was, that wasn't what I
13 meant to ask.

14 THE WITNESS: What I thought Mr.
15 Kelly asked was if people were aware of a risk,
16 would that reduce the need for a warning. And
17 if that was the question, as I understood it
18 that was the question, the answer is yes.

19 MR. KELLY: Paul, when I mentioned
20 players and stuff, I was simply referring to --

21 MR. DEMARCO: Hey, Scott, you're
22 done. I'm done.

23 MR. KELLY: Okay. We'll read and
24 sign.

25 FURTHER THE DEPONENT SAITH NOT.

1 CERTIFICATE

2
3 STATE OF TENNESSEE:
4 COUNTY OF KNOX:

5
6 I, Lynn S. Fields, Certified Court Reporter and
7 Notary Public, do hereby certify that I administered the
8 oath to the deponent, that I reported in machine
9 shorthand the above testimony, that the foregoing pages,
10 numbered 1 to 248, inclusive, were typed under my
11 personal supervision and constitute a true and accurate
12 record of the proceedings, and that there has been no
13 request made by the deponent to review the transcript.

14 I further certify that I am not an attorney or
15 counsel for any of the parties, nor an employee or
16 relative of any attorney or counsel connected with the
17 action, nor financially interested in the action.

18 Witness my hand and official seal this
19 25th of September, 2008.

20
21
22 Lynn S. Fields, CCR
23 Court Reporter and Notary Public
24 My Commission Expires 7/26/11
25

1 I hereby certify that I have read the
2 foregoing transcript of my deposition given at the time
3 and place aforesaid, consisting of pages 1 to 248,
4 inclusive, and I do again subscribe and make oath that
5 the same is a true, correct, and complete transcript of
6 my deposition so given as aforesaid and includes
7 changes, if any, so made by me on the attached errata
8 sheet.

9
10 PETER DAVID HALSTEAD

11 SUBSCRIBED AND SWORN TO before me
12 this _____ day of _____, 2008.

13
14 Notary Public
15 My Commission Expires: _____
16
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25

Lawrence Armstrong Deposition Excerpts

IN UNITED STATES FOR THE SOUTHERN
DISTRICT OHIO EASTERN DIVISION

KELCI STRINGER,)
)
individually, as representative of the)
)
Estate of Korey Stringer, and on behalf)
)
of a class of similarly situated)
)
persons,)
)
Plaintiff,)
)
v.)
)
NATIONAL FOOTBALL LEAGUE, et al.,)
)
Defendants.)

DEPOSITION OF:

LAWRENCE E. ARMSTRONG, Ph.D, FACSM

DATE: July 1, 2008

HELD AT: The Nathan Hall Inn

855 Bolton Road

Storrs, Connecticut 06268

By: Sarah J. Miner, LSR



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1 view that if Korey Stringer had
2 practiced on July 31st, 2001, in that
3 partial ensemble, that he would not have
4 experienced heatstroke?

5 A. No one can know that.

6 Q. I am asking you for your opinion,
7 based on your data.

8 A. Exactly. It is impossible for me
9 or anyone to know that.

10 Q. So it may well be that had
11 somebody used the partial ensemble that
12 you came up with for your study, and if
13 Korey Stringer had been wearing it that
14 day, that heatstroke still would have
15 occurred?

16 A. Is this a hypothetical question?

17 Q. That is right. If Korey Stringer
18 had been wearing the partial ensemble
19 that you have in your study, do you have
20 an opinion as to whether it was likely
21 that he would still have experienced
22 heatstroke?

23 MR. DEMARCO: Objection. Answer
24 it if you can.

25 THE WITNESS: Again, there is no

1 way of anyone knowing that. Heatstroke
2 is a clinical matter. My opinion is
3 about whether the helmet and the
4 shoulder pads contributed as a
5 significant factor.

6 BY MR. TUCKER:

7 Q. My question is, had he not been
8 wearing the helmet and the shoulder
9 pads, but wearing the partial ensemble
10 that you put in your study?

11 A. Yes.

12 Q. Do you have an opinion that it
13 would be likely that he would have
14 lived, survived?

15 MR. DEMARCO: Objection, asked
16 and answered.

17 THE WITNESS: Again, no one can
18 determine that, myself or anyone can
19 determine that. It is impossible to
20 determine that. You are asking a
21 question that cannot be determined.

22 BY MR. TUCKER:

23 Q. So you have no opinion on that?

24 A. Correct, yes.

25 Q. Do you have an opinion that if

1 Korey Stringer had been wearing the
2 partial ensemble that you put together
3 for your study, whether there would have
4 been a difference in his core body -- I
5 am sorry, his rectal temperature or his
6 core body temperature?

7 A. I have an opinion about that,
8 yes.

9 Q. And what is that opinion?

10 A. Based upon the 10 males that we
11 tested, and looking at the slope of this
12 line from, for example, 35 or 40
13 minutes, and beyond, you can see clearly
14 that the slope of the line in the full
15 uniform is much steeper than that of the
16 partial uniform, which are both steeper
17 than the control ensemble.

18 So my belief is that, given
19 everything else the same, with nothing
20 else the same, if we could conduct two
21 by side or three side by side dates with
22 everything identical. Again, you have
23 asked me a hypothetical question, I am
24 answering it hypothetically. I believe
25 that his body temperature would have

1 been lower in the partial, and yet lower
2 in the control if he had only worn
3 shorts and sneakers and socks.

4 Q. But on a football field nobody
5 wears just shorts and socks, correct?

6 A. Correct.

7 Q. It is unrealistic to compare him
8 to your study using your controlled
9 population, isn't it?

10 A. That is partly true, but the
11 evidence can be certainly extended to
12 that situation.

13 As I mentioned earlier, there is
14 no controlled scientific experiment that
15 matches field conditions. And vice
16 versa, no field study is controlled
17 scientifically. So there are two
18 different types of study.

19 Q. So the portion of your study that
20 most closely replicates your field
21 activity was the box lift; isn't that
22 true?

23 A. Yes. I don't see why that is
24 relevant, however.

25 Q. The rectal temperature at the end

Pope Moseley Deposition Excerpts

Deposition of Dr. Pope L. Moseley, taken August 7, 2008

Page 1

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

KELCI STRINGER, individually)
as representative of the Estate)
of Korey Stringer, and on)
behalf of a class of similarly)
situated persons,)
)
Plaintiff,)
)
-vs-) Case #C2 03 665
)
NATIONAL FOOTBALL LEAGUE,)
et al.,)
)
Defendants.)

DEPOSITION OF POPE L. MOSELEY, M.D., taken
by me, Susan L. Bickert, a Certified Shorthand
Reporter and Notary Public in and for the State of
Ohio, at large, as upon Cross Examination, at the
offices of Waite, Schneider, Bayless & Chesley Co.,
LPA, 1513 Fourth & Vine Tower, Fourth and Vine
Streets, Cincinnati, Ohio 45202, on Thursday,
August 7, 2008, commencing at 9:00 o'clock a.m. on
behalf of Defendants All American Sports Corporation
and Riddell, Inc.

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Deposition of Dr. Pope L. Moseley, taken August 7, 2008

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1 A I can only say the best data I have
2 is the helmet and pads. I can't -- I think both of
3 these studies really look at helmet and pads. So I
4 wouldn't be able to tell you -- and I, frankly -- I
5 mean, I'm just looking at the data. I don't know,
6 frankly, if you guys -- I don't know if the people
7 who made the helmet made the pads. So I can't
8 separate those out. They're together because
9 they're together in the data.

10 Q Okay. You're raising a distinction
11 to me, though. Like when I try to -- when I try to
12 talk to you about removing the barrier and the
13 effect that that has on this, you keep coming back
14 at me with, "Well, yeah, but once you're at a
15 certain temperature it might not matter that much";
16 right? Because your thermoregulatory --

17 A Right. You may be in trouble, so,
18 yeah.

19 Q Okay. Before we're at that point on
20 the way up, the problem with this -- with this
21 equipment from your perspective from the standpoint
22 of heat dissipation is that it creates a barrier;
23 right?

24 A Yes.

25 Q And it causes that player to retain

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Deposition of Dr. Pope L. Moseley, taken August 7, 2008

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1 more heat than he would without that barrier;
2 correct?

3 A Yeah. And to not be able to get rid
4 of heat as well, yes.

5 Q Okay. And so, again, if the evidence
6 shows that Korey Stringer was removing his helmet
7 throughout that practice, that would have an impact.
8 That would reduce the marginal effect of the helmet,
9 wouldn't it?

10 MR. DEMARCO: Objection. What are you
11 asking? What are you asking him to assume?

12 BY MR. KELLY (Continuing):

13 Q I think you understand the question.

14 A Yeah. Again, I mean, of the helmet
15 -- the data I've used has been helmet and pads. So
16 if you remove the helmet, all things being equal, it
17 is -- you could have a -- that could be -- that
18 would be better than having the helmet and pads --
19 or the helmet on all the time. But since the data
20 really looks at -- the study data of the impact it
21 is possible, for example, that the pads are more
22 important than the helmet, than removing the helmet,
23 but I don't have that data. We do know the helmet
24 and pads together contribute significantly to the
25 barrier. So we don't know if removing helmet alone

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Deposition of Dr. Pope L. Moseley, taken August 7, 2008

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1 what effect that has, but clearly helmet and pads
2 together are important.

3 Q Okay. I understand that the data
4 that you've reviewed the studies put helmets and
5 pads together. But you're an expert. Okay. You
6 understand this stuff. And you're capable of coming
7 to a conclusion about a very general point, which is
8 if you remove one of the two barriers, that reduces
9 the effect of the piece of clothing that's been
10 removed; right?

11 A That's correct. I think that's
12 correct.

13 Q Now, in terms of the pads, would you
14 agree with me that if there is a layer of equipment
15 in between the skin and the pads which covers the
16 same surface area and is not a breathable piece of
17 equipment that the marginal effect of the pads in
18 this situation is reduced?

19 A I don't honestly know. I don't know
20 for sure.

21 Q So you can't tell me one way or the
22 other. You don't have an opinion as to whether that
23 extra layer would impact the pads or the effect of
24 the pads; is that a fair statement? I'm not trying
25 to force you to have an opinion.

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